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ABSTRACT

The Comprehensive Competencies Program (CCP) is an alternative educational approach specializing in diagnosing deficiencies and prescribing appropriate learning materials (print, computer, audio-visual) at the correct level to help students progress toward "mastery" of their learning objectives. Academic subject areas include math, English as a Second Language (ESL), reading, writing, social studies, and science. "Functional" subject areas include occupational knowledge, consumer economics, government and law, citizenship competencies, health resources, and community resources. This competency-based program is individualized and self-paced. The computer management system allows for immediate feedback with unit tests after each sequence of lessons, and level tests after each sequence of units. Students receive individualized attention in a supportive environment. At-risk learners need a learning environment that is efficient, nonthreatening, and supportive, with real-life relevance and clearly stated learning goals. The CCP diagnostic/prescriptive approach can successfully be used with this at-risk population as a remedial "add on," a replacement for one or more subject area classes, or a completely alternative program of instruction in basic skills. (IAH)

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CCP: A Diagnostic/Prescriptive Approach to Remediation For "At Risk" Students

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The Comprehensive Competencies Program (C.C.P.) is an alternative educational approach specializing in diagnosing deficiencies and prescribing appropriate learning materials (print, computer and audio-visual) at the correct level to help students progress toward "mastery" of their learning objectives. Academic subject areas include math, ESL (English as a Second Language) reading, writing, social studies and science. "Functional" subject areas include occupational knowledge, consumer economics, government and law, citizenship competencies, health, and community resources. This competency-based program is individualized and self-paced. The computer management system allows for immediate feedback with unit tests after each sequence of lessons, and level tests after each sequence of units. Students receive individualized attention in a supportive environment. "CCP learners averaged 1.3 reading or math grade gains in a mean time of 33 instructional hours as measured by nationally normed tests, during the fourth quarter of 1989. The top third of all comprehensive CCP Learning Centers in that quarter averaged an overall cost of $6.24 per instructional hour. The United States Basic Skills Investment Corporation (U.S. BASICS), a 'Not For Profit' organization, supports and disseminates the CCP model, which consolidates in one program all the principles for effective learning identified by extensive education and training research."[1]

Differences from Traditional Approach

A) The use of initial diagnostic testing provides for the development of individualized study plans for each student specific to his or her needs. Learners are not presented the same material at the same rate in a group setting where teachers are "forced to teach to the middle." Students who learn more slowly are not left behind, while students who learn more

quickly do not feel unchallenged. Time is not wasted using this diagnostic / prescriptive approach and it is, on the whole, a much more efficient way to receive instruction.

B) This system incorporates a multi-media approach to instruction utilizing print, audio/visual and computer-assisted instruction. One-to-one verbal instruction is also provided by the teacher when necessary. Students are not forced to learn by whatever means the group is receiving instruction that day. This instructional approach, instead, is geared more to accommodating the individual learning styles of the students. Computer and video graphics enhance the process and the system provides an alternative to the traditional textbook and lecture format.

C) The program is competency-based, with clearly stated learning goals, using attainment of "mastery" of the skill or concept as the criteria for moving on to more advanced material. Students are not forced to participate in endless, meaningless workbook drills in a concept they already understand. They are not made to do "busywork" for the convenience of the teacher. In place of that, students progress through a series of lessons, spending as much or as little time as is necessary for them to understand the concepts. At the end of a small grouping of lessons covering a particular topic such as addition of fractions, for example, the learners will take a mastery test. A score of 80% or more demonstrates mastery, and the student is then allowed to progress to the next grouping of lessons listed on his or her study plan. A percentile score below 80 would indicate the need for review before progressing further. The computerized test results automatically point to the specific lesson or lessons needing to be covered again, so there is no repetition of lessons already understood. Once

those lessons are reviewed and the student passes the mastery test, he or she can then move on to new materials.

D) Immediate feedback is provided to students through the use of interactive computer assisted instruction. After students are presented material on computer, they are asked to provide responses regarding that material. They are given immediate feedback as to their right or wrong answers (in a positive way) and are automatically provided an on-screen review, as needed. Instructional programs, in general, continue to guide the student through the concept until mastery is achieved. Students do not have to wait until being "called on" to receive clarification of a point (if, in fact, they ever do get called on), nor do they have to wait through another explanation of a concept they have already mastered. They also don't have to suffer the humiliation of teacher recrimination in front of the rest of the class if they still don't "get it." The computer doesn't care how many times instruction is repeated. Many students are deterred from asking the questions they need to ask due to this fear, but thrive with the use of this "non-judgmental" instruction tool.

Another means of immediate feedback within this program is the automated computerized test scoring system. All tests are completed on a test scanner card and are fed through the scanner with results being provided within 30 seconds. A composite percentile score indicates overall performance, while subtest percentile scores indicate specific areas of proficiency/deficiency. This is used in identifying if and where the student needs to review. It is also the time at which the student is most interested in seeing his or her results and is the most motivated in acting on those results. The student does not have to wait several days or a week to know how he or she performed (at which time the

class has already progressed to the next concept anyway). CCP testing is, in contrast, used as a meaningful process tool to help, rather than punish, the student who doesn't fully understand the material the first time.

E) Instead of learning subjects in smaller blocks of time, this system can allow for the building of learning momentum during longer periods are allotted to each subject. This is possible since the Learning Center and its staff remains in the same place, while learners may remain for individually determined lengths of time, before going elsewhere. Also, in the traditional arrangement, because much time is wasted while the group gets settled at the beginning of the period and group time is wasted "gearing down" at the end of the period, time is not always left to sufficiently cover the necessary material. With the CCP approach, students enter the room and immediately locate their materials with ease. This is due to the very clear way in which materials are listed in their study plans and identified on the shelf. Students are not forced to wait while others return slips, provide absentee notes, etc. Issues are handled individually by the teacher while the others proceed with their work. Students are, therefore, more productive due to the extra time provided by less "phase up" and "gear down" delays, and by the learning momentum built during that longer block of time.

F) In this program the teacher's role is one of manager of the learning process rather than sole provider, while the student is no longer "spoon fed" the curriculum but rather propels himsel for herself through the process, taking the initiative while building motivation and confidence. A student's self esteem will not suffer as it sometimes can in the regular classroom setting after failing one test after another. By contrast, in this system the student is bound to experience success as he or she will continue to work until reaching the 80%

pass standard. In the way this program operates rarely does a student need to take the test more than twice to reach that standard.

G) This system allows for a more personalized approach by providing for one-to-one instruction at certain intervals and more teacher-student contact time. It is a "high-tech/high-touch" approach to instruction.

CCP provides an approach whereby students can learn and will feel less threatened by the educational process. A secure and happy student is much more likely to want to learn. These goals or objectives which meet both teacher and student needs are met through an alternative approach using the CCF program of diagnosis and prescription, multimedia instructional methods, a competency-based curriculum with immediate feedback, and, whenever possible, longer instructional periods for enhanced productivity. It is a more personalized and sensitive approach, as well. Student achievement is documented through the use of standardized grade level testing administered upon entry and exit to the program, measuring relevant grade level gains. Progress is documented throughout the year by means of CCP unit, level, and subject strand testing.

"At risk" learners are definitely in need of adjustments and modification to the way in which instruction has traditionally been delivered to them. Many have fallen way behind with regard to the acquisition of basic skills. Current dropout statistics clearly indicate that the present instructional approach is just not working for everyone. Given the various social, economic and personal factors impacting their daily lives, it is not surprising that school and learning is often low on these students' list of priorities. For them, the learning environment must be efficient,"non threatening" and supportive, with some real-life relevance and clearly

stated learning goals. In order to meet the needs of this disadvantaged population, the CCP diagnostic/prescriptive approach can successfully be used as a remedial "add on," a replacement for one or more subject area classes, or as a completely alternative program of instruction in the overall pursuit of basic skills mastery.

1. "The Comprehensive Competencies Program (CCP): A 'high-tech/high-touch' approach to basic skills mastery," U. S. BASICS, Alexandria, VA 1990.